

Title (en)

Safety valve for high-pressure pump; high-pressure water jet machine

Title (de)

Sicherheitsventil für Hochdruckpumpen, Hochdruckwasserstrahlmaschinen od.dgl.

Title (fr)

Vanne de sécurité pour pompe à haute pression; machine à jets d'eau à haute pression

Publication

**EP 0602444 B1 19960131 (DE)**

Application

**EP 93119250 A 19931130**

Priority

DE 4241344 A 19921209

Abstract (en)

[origin: EP0602444A1] The object on which the invention is based is to design a safety valve which can be used in a pressure range of up to 4000 bar and above with a high accuracy of operation when the set pressure is exceeded, with little wear and a long service life and permits frequent response without readjustment. The valve element of the safety valve is designed as a spring-loaded control piston (3). The valve seat (2) and the control piston (3) are provided with a central passage (21, 22) for a quantity tapped off from the pressure medium being conveyed and the control piston (3) has an annular surface (23) acted upon by the pressure medium. The spring (5) assigned to the control piston (3) is supported against a switching piece (6) which, when the critical working pressure is reached, can be moved to the side remote from the valve seat (2) by virtue of the release of a catch. The safety valve can be used for high-pressure pumps that can be used in hydrodynamic cleaning, digging or cutting equipment. The valve can likewise be used in internal pressure-testing, test and process systems. <IMAGE>

IPC 1-7

**F16K 17/04**

IPC 8 full level

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CPC (source: EP US)

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DOCDB simple family (application)

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